

Bankruptcy Law Reform – A new tool for foreclosure avoidance

Structured Products Research • Americas

Contributors

Rod Dubitsky
+1 212 325 4740
rod.dubitsky@credit-suisse.com

Larry Yang
+1 212 325 2952
larry.yang@credit-suisse.com

Thomas Suehr
+1 212 325 3663
thomas.suehr@credit-suisse.com

Summary:

- The proposed bankruptcy law reform¹ will allow a judge in a Chapter 13 filing to reduce or “cram down” the balance of a mortgage securing a principal residence to the current property value, along with other rate and amortization term changes.
- During the implementation of the bankruptcy plan, the crammed down portion of the mortgage will be treated as an unsecured claim of equal priority to other unsecured claims such as credit card debt. The crammed down amount may therefore be partially recovered from a borrower’s disposable income over a 3- to 5-year period. The benefit of a mortgage cram down to the borrower is contingent upon successful completion of the bankruptcy plan.
- The fact that close to 70% of delinquent non-agency loans have negative equity, compared to only 37% of current loans with negative equity, indicates that lack of equity potentially is an important driver of today’s performance deterioration. Further, this data show that a large percentage of delinquent borrowers could benefit from cram downs.
- Overall we think the bankruptcy reform will be a net positive in terms of foreclosure reduction, as it may be an effective way to improve both home equity and affordability. It has several attractive features relative to other loss mitigation alternatives, such as comprehensive debt restructuring, less moral hazard, and direct dealing with second liens. Though it is an important new tool in the toolkit, we can’t dismiss unintended consequences such as: (1) many more borrowers filing than who qualify, (2) bankruptcy bar ramping up its marketing machine, and (3) new defaults created by borrowers who believe (falsely or otherwise) bankruptcy will be their salvation.
- Only borrowers who can service the secured portion of the mortgage and a portion of the unsecured portion will be eligible. However, it’s not entirely clear whether borrowers with high income relative to debts or very low income would file bankruptcy anyway. Likewise some very marginal borrowers may be confirmed, but will ultimately fail the plan.
- We expect the bankruptcy plan will provide about a 20% reduction in foreclosures. This is based on our belief that many delinquent loans are too far underwater relative to borrowers’ income, many properties are empty, and many borrowers wouldn’t want to go through the onerous bankruptcy process.
- We expect the new bankruptcy reform will increase loan mods, particularly principal reduction mods, as it is likely to both pressure and also give justification to servicers to more actively pursue principal reduction mods.

¹ Though the bankruptcy cram-down bill didn’t make it into the initial stimulus package, we expect it to reemerge.

- One paradox of the bankruptcy reform is that it is premised on the assumption that the bankruptcy courts can handle an upsurge in fully documented loan mods while at the same time the government and industry has given up on a fully documented streamlined loan mod protocol. If servicers can't handle documenting a large amount of loan mods, why would the government assume the bankruptcy courts can handle it? Though we don't have a clear view as to whether the bankruptcy courts can handle it, we do believe servicers should attempt to create a streamlined mod program that mimics some of the features of a bankruptcy plan (e.g., strict oversight, monitoring of the plan, all income and expenses documented). As we've written previously, we believe that with government support, the industry can use technology to create a fully underwritten, though streamlined, mod plan. The streamlining would be done via technology rather than failing to fully document the borrowers' financial status.
- The impact of mortgage cram down on a subprime senior bond will depend on its relative position in the AAA stacks, the success of mortgage cram down in foreclosure reduction, and the structural feature of whether the principal distribution of sequential AAAs will change from sequential to pro rata after all subordinates are wiped out, and how the cram down will affect the timing of change. We present a hypothetical sample to show how the cram down will affect the values of front pay, penultimate and LCF AAAs.
- The cram-down law will be a distinct negative for many senior prime RMBS bonds that have a unique feature wherein bankruptcy losses are set at a maximum dollar amount, beyond which additional bankruptcy-related losses will be allocated to all bonds regardless of seniority. Because this bankruptcy threshold is set very low, should the bankruptcy law pass, it's likely that such senior prime bonds will see accelerated default and loss realization.
- The plan is a negative for card and auto lenders, as these lenders will be forced in bankruptcy to share the pain with mortgage lenders. Currently, given the limited benefits to homeowners under the existing bankruptcy law, many borrowers may continue to pay their cards and autos and default on their mortgage. For those borrowers filing for bankruptcy cram down, the credit card and auto lenders will be forced onto the same repayment plan as the mortgage lenders. Or put another way, some of the losses due to the appallingly weaker underwriting decisions on the mortgage loans will get socialized with the card and auto lenders which, thus far, have not appeared to have gotten out of hand in terms of underwriting.

In a new attempt to combat rising foreclosures, Congress will reintroduce a previously defeated bill to reform bankruptcy law so that mortgages securing borrowers' principal residences can be modified by a judge in a Chapter 13 bankruptcy filing. With a Democratic majority in both House and Senate, coupled with support from President Obama during his campaign, we expect the renewed effort will succeed this time. Mortgage terms that can be modified include balance, rate and amortization term.

Key Elements

- **Balance:** The balance of a mortgage loan would be reduced to the current property value and the amount of the reduction would be treated as an unsecured loan and partially paid back over a period of 3- to 5-years². The amount of the unsecured claim that can be recovered by the bankruptcy plan will be based on the borrower's disposable income and the remaining unsecured claims will be discharged once the borrower has successfully completed the plan. Cramming down the unsecured part of the mortgage to a five-year payback means that much of the unsecured cram down won't get paid back, even if the borrower could pay it back over a 30-year time frame (e.g., a 100K unsecured loan would correspond to 20K/year over a five-year period vs. about 3K a year over 30 years). Assuming the borrower could only afford 3K, using a five-year payback means that 17K/year will not be required to be paid back. This means that many borrowers who can service the full mortgage over 30 years can reduce their payments merely because the crammed portion has to be paid back over five years.
- **Term:** The loan term will be extended to no less than 40 years minus current loan age.
- **Rate:** The secured claim will accrue interest at a fixed conforming rate, plus a small premium.³
- **Loans eligible:** The new cram down would apply to all existing owner-occupied mortgages.
- **Modification Attempt required:** Prior to filing the bankruptcy, the borrower must show that the borrower reached out to the lender and requested a loan modification. We're not sure how this will work in practice, as simply requesting a loan mod doesn't mean the borrower or lender makes a good faith attempt to follow through.
- **Citi Blessing:** The latter two changes were based on an agreement with Citibank and are not yet included in the draft bill.

Key Benefits:

- The proposed bankruptcy law reform provides a useful tool to **address both the affordability and equity issues borrowers face today.**
- The fact that close to 70% of delinquent non-agency loans have negative equity, compared to only 37% of current loans with negative equity, indicates that lack of equity potentially is an important driver of today's performance deterioration and many such borrowers may be motivated by the cram-down feature of the new bankruptcy law.
- **Close oversight:** The combination of close supervision by the bankruptcy trustee on borrowers' income and expenses for five years and the cram-down benefit being contingent on completion of the bankruptcy plan will help reduce incentives for borrowers to file.
- In addition, we expect the new **bankruptcy reform will increase loan mods**, particularly principal reduction mods, as it is likely to both pressure and give justification to servicers to more actively pursue principal reduction mods.

² The length of bankruptcy plan will be not less than five years if the current family income of borrower is not less than the state median family income after adjusting family size. Otherwise it will be three years.

³ Additional elements in the proposed amendment include waiving the credit counseling requirement if debtor's principal residence is at risk of foreclosure and limiting excessive fees that lenders can charge during the bankruptcy process.

- **Forces all creditors to the table:** The main problem with all other solutions to the foreclosure crisis is that none of them forces all creditors to the table to work out a repayment plan. Currently the borrower will need to pursue separate action with all creditors. And given that the mortgage is the largest loan for most borrowers, it's likely that borrowers will focus their energy on mortgage lenders. Hence, the bankruptcy law will let other lenders share the mortgage burden.

Key negatives:

- Once a borrower files for bankruptcy relief, negotiations with lenders cease and lenders no longer control the outcome. It's certainly possible that many borrowers may be able to pay more outside of bankruptcy – albeit with a struggle than they would be able to pay in bankruptcy.
- Plan is too successful and bankruptcy courts get clogged: Our understanding is that currently the bankruptcy courts have some capacity to handle an increase in filings, but should this law result in a spike in bankruptcy, we could see delays in resolving cases.

Impact: modestly positive

The impact of the law reform at this stage is unclear as we're not sure what percentage of borrowers can and will take advantage of this option. For borrowers who can't even pay the secured amount of the mortgage, bankruptcy isn't an option. For borrowers who have lots of excess income, bankruptcy will provide little benefit. So only borrowers who want to stay in their homes, can afford the secured amount but not the entire mortgage, and are willing and able to go through the invasive procedure of Chapter 13 bankruptcy seem likely to apply.

Bottom line is that the new plan adds an important new tool in the foreclosure avoidance arsenal and will likely result in a marginal reduction of foreclosures.

Brief Introduction to Chapter 13 Bankruptcy

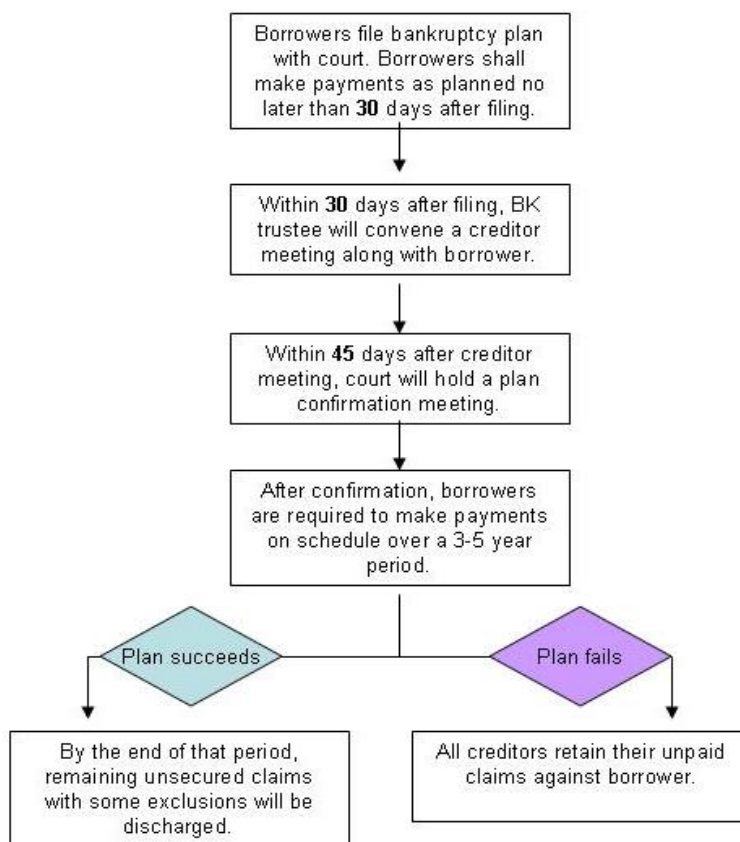
A Chapter 13 bankruptcy is a type of bankruptcy proceeding in which borrowers establish a repayment plan for all debts under close supervision of the bankruptcy trustee. After the filing of Chapter 13, the foreclosure process is halted and borrowers are permitted to cure the defaults and reinstate the mortgage during the bankruptcy plan.

In the Chapter 13 plan, all of a debtor's disposable income is used to pay down the unsecured debt over a period of 3 to 5 years. Remaining unsecured debt at the end of plan will be discharged

During this plan, all of the debtor's disposable income will be used to pay down the unsecured debt for an applicable commitment period of three to five years. 'Disposable income' here is defined as the total family income other than allowed exclusions, less administrative expense of the bankruptcy plan and payments to allowed secured claims and reasonable and necessary expenses that are based on national and local standards, and other necessary expenses as issued by IRS. In most cases, the disposable income would not be enough to pay off unsecured debt (otherwise debtor wouldn't file bankruptcy). If the debtor can successfully complete the plan at the end of the commitment period, the unpaid balance of unsecured debts will be discharged. Exhibit 1 illustrates the timelines typically related to a Chapter 13 filing.

To borrowers, the Chapter 13 bankruptcy also represents a relatively long period of commitment during which the family budget is closely monitored and controlled by the trustee and any expenses over the standards must be justified and approved. Borrowers will be forced to cut lavish living styles or unnecessary expenses. The benefit of debt reduction from bankruptcy is contingent upon borrowers' successful completion of the plan.

Exhibit 1: Typical Chapter 13 bankruptcy timeline



Source: Credit Suisse

The Chapter 13 bankruptcy filing has some attractive features compared to other loss mitigation alternatives

Comparing Cram Down to Other Loss Mitigation Alternatives

Below we compare the new bankruptcy law to other existing loss mitigation alternatives, particularly to the Streamlined Modification Plan (promoted by both the FDIC and GSEs) and Hope for Homeowners (H4H) FHA refinancing (Exhibit 2). The proposed bankruptcy bill has several unique and attractive features as summarized below:

- Comprehensive debt restructuring:** The bankruptcy filing is the only way to force all creditors to the table and agree to a repayment plan that takes into account all debt. It also forces borrowers to cut unnecessary expenses and avoid building new debt in the future (in fact borrowers can't take on new credit card debt). Regular loan mods or refinancing can only control mortgage debt.
- Addresses both affordability and equity:** Mortgage modifications allowed by the new bankruptcy law not only restore equity to borrowers but reduce future mortgage payments. By comparison, borrowers in the streamlined mods plan are still liable to pay off negative equity at future sale or refinancing if the housing market does not fully recover (and in our view the large forbearance would result in an inevitable default based on most views of home prices). H4H is superior to bankruptcy in that the borrower doesn't have to pay any of the unsecured amount and so many borrowers may choose H4H for that reason. So H4H has true equity relief, while bankruptcy makes equity relief contingent on completion of the bankruptcy plan.

- **Second lien will be crammed down first:** Cram down will start with the second lien mortgage before the first lien loan is touched. The streamlined mods plan would grant forbearance to the first lien mortgage without directly addressing the second lien issue. H4H refinancing requires second lien holder approval.
- **Less moral hazard:** Perhaps among all loss mitigation alternatives, bankruptcy may have the least moral hazard. Given the extensive documentation needed and the need to comply with a court-imposed financial plan for five years, it's a lot harder for borrowers to fake their way through a bankruptcy. Also since the benefit of cram down is contingent upon the success of bankruptcy, borrowers also have incentive to complete the plan. Therefore, borrowers who chose bankruptcy to deal with negative equity have to really want to stay in their homes, have to be able to service the secured portion of the mortgage, be willing to live on a budget for five years and have expenses tightly controlled, etc. Borrowers who are uncertain about such prospects may choose to walk away or negotiate a loan mod. Borrowers who are looking for a "free ride" and want to expunge their negative equity should find foreclosure a more palatable alternative.
- **Monthly payments:** Chapter 13 may actually result in a higher monthly payment to investors relative to other loss mitigation alternatives, as the secured portion bears a market interest rate and the borrower has to pay back some amount of the unsecured debt. However, in bankruptcy the secured loan is reduced automatically whereas with many of the mod plans, the loan amount is reduced depending on the borrowers' ability to pay.

Exhibit 2: Comparing bankruptcy reform to Streamlined Mods Plan and H4H FHA refinancing

	New Bankruptcy Law	Streamlined Mods Plan	H4H Refinancing
Principal forgiveness	To current property value	Just forbearance. Borrowers need to pay forborne principal at time of sale or refi.	Below the current property value due to LTV requirement of FHA loans
New loan rate	Prevailing conventional mortgage rate plus premium	Flexible, can be as low as 3%.	FHA loan rate + annual insurance premium
Second Liens	Will be crammed down first and then to first lien	Rate can be reduced under certain plans but no direct requirement on seconds charge off before first lien mods	Will be released with receipt of small payment
Timing of loss realization	Cram down contingent on successful completion of bankruptcy plan. Timing of loss realization varies by deal	Immediate	Immediate
Foreclosure	Halted till borrowers fail the bankruptcy plan	Stopped	Refinancing existing loans at loss
Benefit/Cost to borrowers	Restore equity and help improve affordability. But subject to very tight budget during bankruptcy period. Brings all creditors to the table	Solve affordability issue but still face negative equity	Solve both affordability and equity. But need to share appreciation with government in future
Benefit/Cost to investors	Reduce default and severity to extent of bankruptcy plan success and some of cram downs might be recovered during bankruptcy period. Face redefault risk and liquidation delay	Reduce default to extent of mods plan success and benefit from future appreciation. Face redefault risk and liquidation delay	Get paid off up front and no redefault risk. But may take extra loss to meet FHA LTV requirement and lose future appreciation

Source: Credit Suisse

Benefit and Cost to Borrower and Investor: An Example

In this section, we will use income, expense and debt information from a hypothetical California family to illustrate the benefit and cost to borrower and investor from a mortgage cram down. We also show how the benefits and costs will change under different income and home price decline scenarios. Exhibit 6 at the end of this report shows the details for all assumptions we use for this test.

In this test, we simulate four different income scenarios that in turn are determined by different ratios of current mortgage payment to pre-tax income. The higher the ratios, the less affordable the current mortgage and more stretched the borrower.

Example parameters:

- \$400K property at purchase.
- Funded with \$320K first lien (8% coupon) and \$80K second lien (10% coupon).
- Uses standard California assumptions for monthly household expenses.
- Assumes 30% decline in home prices since origination.
- Other unsecured debt: \$10K

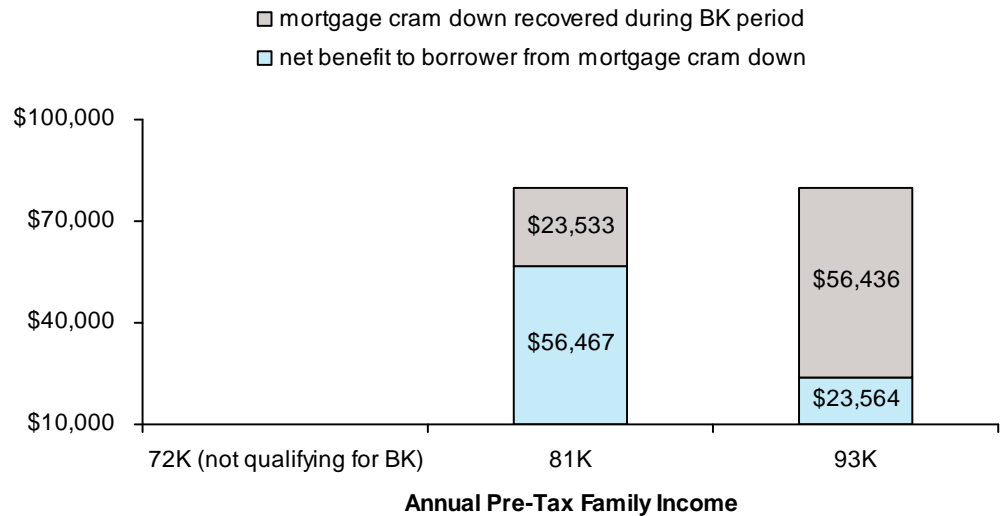
Several observations can be drawn from this hypothetical test:

The new bankruptcy form reduces borrower's mortgage payment. But highly stretched borrowers may not be eligible while high income borrowers may find the benefit of cram down less than expected

- **Reduction in required mortgage payment on crammed down mortgage:** The borrower receives a significant reduction in required mortgage payments under this new amendment. In our example, the new monthly payment from the secured mortgage is 43% lower than pre-bankruptcy monthly payments, based on an assumed 30% decline in home prices (this reduction is purely based on the crammed down or secured mortgage – below we address payments due on the unsecured portion of the mortgage). This reduction is due to a combination of lower mortgage balance and other term modifications (lower rate and longer amortization). As a result, the borrower's affordability is improved as indicated by an increase in disposable income. The reduction in payment for the secured component is the same for all borrowers. However, as discussed in the following section, borrowers with different incomes will make additional different unsecured payments.
- **Payment to unsecured debts:** Some low income borrowers would not qualify for a bankruptcy plan if they are unable to even pay the new crammed down mortgage, as shown in Exhibit 3 and also indicated by negative disposable income in row 25 of Exhibit 6. In our example, the borrower who earns \$72K can't even service the crammed down secured mortgage and hence wouldn't qualify for Chapter 13. For the borrower earning \$81K, the borrower would only have to pay 29% of the unsecured amount while a borrower earning \$91K could pay back over 71% of the unsecured portion of the mortgage (and therefore likely wouldn't file). As shown in our test, under the same assumptions of property and loan, borrowers at different income levels actually have the same required mortgage payment in the bankruptcy, and the income simply determines how much of the unsecured amount they are required to pay back. One caveat for our test is that it only includes allowed standard expenses. Should borrowers have other allowed expenses specific to their situation, such as alimony, the care of a family member and a certain amount of charitable distributions, the disposable income and payment to unsecured debt would be lower than what is shown here.

Exhibit 3: Net benefit of mortgage cram down varies by family income

This result is based on family budget and loan info as specified in Exhibit 6. Property value decline is 30%.



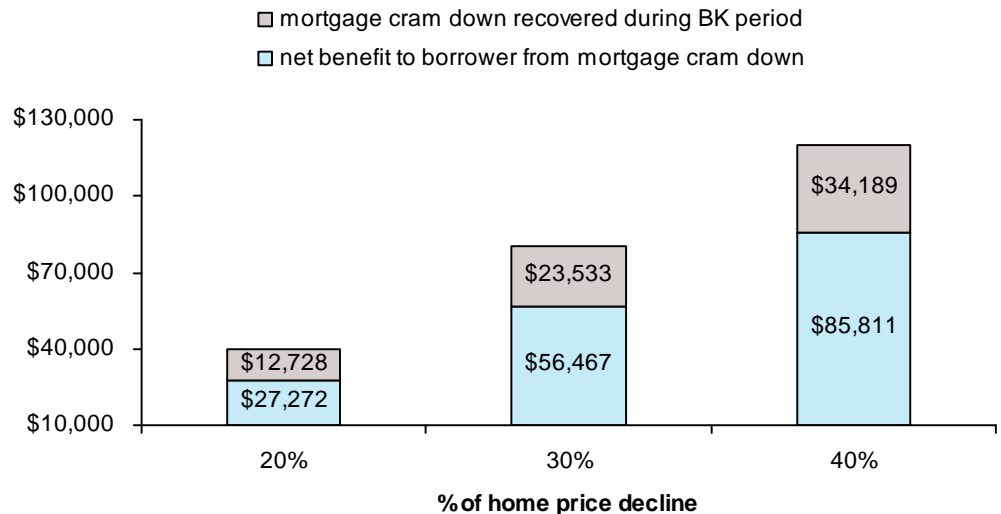
Source: Credit Suisse

- Given the income level, the actual home price declines also affect the benefit of a cram down to borrowers. It is expected that a larger decline will result in a bigger cram down and therefore increase the benefit to borrowers. Our test confirms that when home depreciation increases from 20%-40%, the cram down benefit in dollar amount also rises from 27K to 86K.

Bankruptcy cram down should result in a lower severity relative to foreclosure, unless failure rate of bankruptcy plan is very high and severity at future redefault increases significantly

Exhibit 4: Net benefit of mortgage cram down also varies by home price decline

This result is based on family budget and loan info as specified in Exhibit 6. Annual family income is assumed to be 81K.



Source: Credit Suisse

Impact on expected loss

Since the cram down can only discharge the property value decline that will be lost in the liquidation anyway, the trust will not be worse off from the perspective of expected loss, assuming the default rate post bankruptcy is contained and the severity of future redefault would be comparable to the severity in foreclosure. Investors will benefit from reducing avoidable foreclosures (and the associated impact on housing), which in turn depends on the failure rate of the Chapter 13 plan. Our review of the bankruptcy filing of securitized subprime loans shows that the average failure rate is about 54%. We assume 60% severity for the first lien loan and 100% severity for the second lien if the property is foreclosed today. We also assume a higher future severity of 65% for the first lien loan at the time of bankruptcy plan failure to take into account possible further property value decline, deterioration and additional carry. The increase in severity will depend on a number of factors: when the failure happens, future HPA assumptions and property condition. Assuming a 50% failure rate, the probability weighted first lien expected loss under the cram down is about 37% in our base case (\$81K annual family income and 30% property value decline), compared to 60% in the case of being foreclosed today. This severity assumption includes the repayment of the unsecured portion of the mortgage (e.g., with an \$81K income the borrower pays back 29% of the crammed down amount). Obviously this is a single example and the true severity is difficult to assess. Nevertheless, we believe this is a realistic/typical example and illustrates the potential reduction in severity. Considering that this loan is already at risk of foreclosure, such a decline in expected loss from cram down is still meaningful.

We expect the failure rate under a bankruptcy cram down to be much lower than the failure rate under the old bankruptcy law. This assumption is consistent with our October 1 loan mod report ([Click here for report](#)) where we showed that the redefault rate of a mod is far lower when payments are reduced. As we discussed in our March 2007 HEAT report ([Click here for report](#)), the means test required by the 2005 bankruptcy law pushed more high risk borrowers into Chapter 13 bankruptcy rather than into Chapter 7, therefore accounting for the higher failure rate in bankruptcy. But because the new reform links the cram-down benefit to the success of the bankruptcy plan, borrowers will have more incentive to complete the plan.

There is some concern that the increase in Chapter 13 bankruptcy filings will delay liquidation and thereby increase loss severity upon default should the borrower fail to complete the plan. But three built-in mechanisms in the bankruptcy law should to some extent mitigate this issue:

- Foreclosure and liquidation will be delayed to the extent a borrower is successfully executing the bankruptcy plan. Since the cram-down benefit is contingent on the successful completion of the bankruptcy plan, borrowers will have incentive to succeed and this will mute the failure rate.
- Right after the bankruptcy filing, borrowers are required to make modified mortgage payments on time. Some of the crammed down balance will potentially be paid from a borrower's disposable income, too. So investors or lenders will receive stable cash flow during the bankruptcy period.
- If the borrower fails the plan, the foreclosure process resumes where it left off and the lender will not have to reset the foreclosure clock.

Notwithstanding these mitigating factors, many borrowers will not complete their bankruptcy plans (though the completion rate should be higher than the current law, which doesn't include a cram down), and loss severity will likely be higher on the loans that failed the plan, relative to the severity had the loan gone straight through to foreclosure.

There are two remaining issues in the proposed amendment that may affect the benefit and loss to both borrower and investor.

How the property value is determined and how dynamic the plan is are main issues related to bankruptcy reform

- **How is the current property value determined?** The mortgage balance will be crammed down to the current property value in the amendment but the law is vague on how the value is determined. Will it be “fair market value” from independent and third party appraisal or “liquidation value?” Since property valuation has been frequently used in the current bankruptcy filing, we expect the new amendment will follow the existing convention. Nevertheless, there is a distinct possibility that the value used for cram down will differ from the value the lender receives upon foreclosure sale.
- **How dynamic will the bankruptcy plan be?** E.g., how will the bankruptcy plan incorporate future property appreciation and/or borrower income changes given that a normal bankruptcy plan will last from three to five years and many things can change during that period? We’re not sure the extent to which creditors or debtors can petition revision of a bankruptcy plan, but that flexibility may enable lenders to capture additional income and home price appreciation during the bankruptcy period. Further, borrowers who suffer a decline in income may be able to petition a change in plan.

Impact on RMBS and ABS Investors

Inconsistent recognition and waterfall allocation of cram-down loss and timing of loss realization should cause new issues for RMBS investors

While it has potential to reduce losses to investors, the proposed bankruptcy law amendment also raises new issues:

- **One of the most important issues for RMBS investors is how the loss from bankruptcy cram down is recognized and allocated in the cash flow waterfall.** Unfortunately, our review of several subprime deal documents find that this issue is treated inconsistently. For some deals, such loss is considered part of realized loss (and therefore allocated to subordinated bonds immediately), while other deals are silent. We expect those deals that don’t specify recognition of cram-down loss will also consider that loss as part of realized loss as doing so follows the common market understanding, but we would like to remind investors to watch out for possible inconsistency in trustee reporting. We experienced a similar issue last summer on the recognition of loss from principal mods. The complicating factor for bankruptcy cram down is that cram down is technically not permanent until the bankruptcy plan is complete. So some trustees may choose to recognize losses only on completion of the plan. The latter interpretation would benefit subordinate investors as it would delay reduction of principal and increase their receipt of coupon payments.

Many prime and ALT A deals allow excess cram-down loss to be allocated to senior and subs pro rata

In addition to loss recognition, waterfall allocation also has big variations across deals. For subprime deals, such cram-down loss will follow the same bottom-up rule as liquidation loss. But we note that many prime and ALT A deals have a special loss allocation or “carve out” rule, related to bankruptcy cram down, which allows the cram-down loss to be allocated among senior and subs pro rata if the total bankruptcy loss amount is over a certain threshold. This threshold is normally very low – we believe no more than \$100K in most cases. This could result in immediate losses to senior investors should bankruptcy and cram down spike. Given that one or two jumbo loan cram downs are sufficient to wipe out the bankruptcy loss carve-out amount, such a risk is very real to investors.

- **Impact on subprime senior bonds:** Impact of mortgage cram down on a senior bond will depend on:
 - its relative position in the AAA stacks
 - factors related to cram down: percentage of borrowers that would file bankruptcy, plan failure rate, severity at future default

- o the timing of cash flow and principal distribution rules within the AAA stack. Most subprime deals (about 65%⁴) switch the principal distribution among the AAAs from sequential to pro rata after all subordinations are wiped out. For those AAAs outstanding at the time of the switch, the pro rata distribution essentially forces it to share all future principal and loss with other AAAs. Therefore, longer AAAs benefit from the switch, at the expense of shorter AAAs.

The faster a AAA can pay down (or the longer it takes to wipe out subordination), the better it is for that AAA. Since bankruptcy can have the effect of delaying losses and the timing of the switch, shorter AAAs can pay down over a longer period of time. Therefore, some short AAAs may benefit from more bankruptcy filings, at the expense of longer AAAs, which we demonstrate below.

From analyzing several representative deals, we've found that:

Very short AAAs, those that are expected to pay down in full before subordinations are wiped out, are relatively neutral to our cram-down scenario, although duration extension has a slightly negative impact;

AAAs in the middle of the stack can benefit from the cram-down scenario as the moment of switching to pro rata is delayed, allowing more of the bond to pay down before the switch;

AAAs at the bottom of the stack would be impacted negatively by the very same reasoning above, though such a negative impact will be compensated partially by loss reduction from cram down.

To illustrate this, we use MABS 2006-NC3, a deal from ABX 07-1 with performance close to the index average, and look at the valuation change of its sequential AAAs, A3-A5, which are front pay, penultimate and LCF AAAs respectively, under two assumptions corresponding to either with or without cram downs. We don't include the current pay AAA, A2, as it will be paid off pretty soon (factor is 0.3 after latest distribution) and is less likely to be impacted by the cram down. For simplicity, we make the following assumptions on yield and performance:

- o Target yield is 20% for both bonds;
- o Voluntary prepayment is set as 5 CPR and severity is 70% consistent with recent performance.
- o We propose two CDR scenarios to reflect the impact of bankruptcy cram down:
 - No cram down: 22 CDR flat, which reflects recent CDR experiences;
 - With cram down: 22 CDR for next six months, then 15 CDR for next 12 months and then 18 CDR for future months. Such a curve is intended to replicate the fact that near-term CDRs are determined by current REO pipelines, which won't benefit from cram down. The lower CDRs thereafter reflect that some delinquent or foreclosed loans file for bankruptcy and therefore reduce near-term defaults. Here we assume that about 30% of borrowers in foreclosure or delinquency may file bankruptcy, so the future CDRs would be reduced to 15 ($=22 \times 0.7$). Higher tail CDRs reflect possible failure of bankruptcy plans. Nevertheless, as we discussed before, many factors will impact the significance of the new bankruptcy law on foreclosure reduction. The scenario we propose makes several simplifying assumptions and is only for illustration purposes.

⁴ In other 35% deals, the AAA principal distribution will remain sequential after the subordinates are wiped out, therefore the longer AAAs essentially become subordinate to front pay AAAs.

Exhibit 5 shows the price difference for each bond under two scenarios. Since the A3 bond doesn't take loss in either scenario, its price just slightly declines by 1.4 points as the delayed liquidation cash flow extends its weighed average life from 2.1 year to 2.2 year. The A4 bond, the Pen AAA, benefits most from the cram downs as its price rises by 7.7 points, a 24% increase from the price of 31.7 prior to cram down. As we discussed above, the delay of the switch, from August 2012 to March 2015, helps this bond receive more principal before sharing with A5; therefore, its total writedown declines from 40% to 16%. Correspondingly, the A5 bond, the LCF AAA, sees a price decline of 4.6 points because of this delay, although the loss reduction from cram down helps reduce its writedown from 47% to 42%.

Exhibit 5: Mortgage cram down affects AAAs differently

	A3 (front pay AAA)		A4 (Pen AAA)		A5 (LCF AAA)	
	Scenario 1 (current law, no cram down)	Scenario 2 (new law, with cram down)	Scenario 1 (current law, no cram down)	Scenario 2 (new law, with cram down)	Scenario 1 (current law, no cram down)	Scenario 2 (new law, with cram down)
Price	70.5	69.1	31.7	39.4	27.3	22.7
WAL	2.1	2.2	15.2	9.5	17.2	17.9
Writedown	0%	0%	40%	16%	47%	42%
Principal Window	May 2010 to Dec 2011	Jun 2010 to Feb 2012	Dec 2011 to Jul 2038	Feb 2012 to Jul 2038	Aug 2012 to Jul 2038	Mar 2015 to Jul 2038

Source: Credit Suisse

- Bankruptcy cram down is expected to increase principal reduction mods.** The new amendment should both pressure and also provide justification for servicers to more actively pursue principal reduction mods. Further, based on Citi's agreement the law also requires borrowers to contact servicers on possible mods prior to the bankruptcy filing (it's not clear whether a borrower has to contact both the second and first lien servicers – very important as most borrowers in foreclosure have loans to contend with). This could particularly impact second lien mods as more second lien servicers may agree to a significant principal reduction.
- Negative impact is expected on Credit Card and Auto ABS.** Since the amount of cram down (i.e., reduction in mortgage balance) will become an unsecured claim and have same priority to all other unsecured claims (like credit card debt), their large balance is likely to reduce the proportion of disposable income that would otherwise go to credit card debt. In addition, if the new bankruptcy law change were to trigger a significant rise in bankruptcy filings, the credit card ABS should face a jump in charge-off rates. Likewise, borrowers who file bankruptcy to cram down their mortgages will also have their other secured debt crammed down (auto loan balances cannot be crammed down during the first 2.5 years of purchase. This more restrictive cram down for autos was included in the 2005 bill). The benefit of auto cram down depends on the break-even point between depreciation on the vehicle and amortization of the loan. The cram-down benefit for auto loans may be limited except for trucks and SUVs and other vehicles that have declined in value relative to the loan amount. Further, 72-month loans are more likely to have a cram-down benefit, as the loan pays down slower than the auto loan in many cases because of the slower amortization of 72-month loans.
- HELOC and close end seconds:** Given the dramatic decline in home prices, a large percentage of outstanding second liens would be completely crammed down under the proposed bankruptcy law. Therefore, there is a large risk of a dramatic increase in losses for second lien investors and lenders. We believe that many second lien borrowers are still in relatively strong economic condition (particularly bank quality HELOC borrowers), so it's unlikely that every second lien holder would rush to the bankruptcy courts to have their HELOC/CES crammed down. But for the many borrowers who are close to the edge, the new bankruptcy law would give them both equity and payment relief. Since most users of bankruptcy will likely have first and second lien mortgages, we expect an acceleration of losses on second liens.

Mortgage Market In Danger?

We are not very convinced that the current bankruptcy reform alone will drag the mortgage and housing markets down further

Some oppose the bankruptcy reform on the basis that it is tantamount to a change of the rules in midstream, rewriting contracts, etc. Further, many contend that a mortgage that can be crammed down will require a much higher interest rate – 2% higher according to the Mortgage Bankers Association. But a new study by Adam Levitin from Georgetown University didn't find empirical evidence that the proposed mortgage cram down will have meaningful impact on mortgage interest rates (based on looking at pricing of mortgages that currently permit cram down, such as second homes and comparing them to pricing on owner-occupied homes (which don't allow cram downs today).. Also rule changes in the middle of the game are nothing new. Did rates drop dramatically after the 2005 bankruptcy law for credit card and auto borrowers (both of whom faced increasing restrictions on bankruptcy filing)? If tightening the bankruptcy law for borrowers in 2005, failed to lower rates for affected borrowers, it's hard to imagine that rates will necessarily rise based on the proposed bill. Further, filing a Chapter 13 bankruptcy is a fairly onerous procedure and many borrowers may choose foreclosure rather than bankruptcy. Assuming most borrowers who file can't pay their mortgage anyway, the losses lenders would suffer would not seem to be any higher under the bankruptcy proposal and may in fact be lower as shown in our test. Therefore we don't believe the bankruptcy reform will materially impact the pricing or availability of mortgage credit. Finally, the law, based on agreement with Citi, only impacts existing mortgages and therefore is less likely to have an impact on new mortgages (though some may argue that bankruptcy cram down is a slippery slope and lenders may price new mortgages as if cram down would apply, since one cannot rule out the possibility that cram down will be applied to new mortgages).

Exhibit 6: Illustration of mortgage cram down

Property and Loan	
1 Property Value at Purchase	400,000
2 First Lien Loan Amount (80% of purchase price)	320,000
3 First Lien Monthly Payment at 8% rate	2,348
4 Second Lien Loan Amount (10% of purchase price)	40,000
5 Second Lien Monthly Payment at 10% rate	351
6 Down Payment	40,000
7 Total Mortgage Payment Prior to Cram Down	2,699
Expense(Assuming 3-person family)	
8 National Standard for Food, Clothing and Other	1,151
9 National Standard for Out-of-Pocket Health Care	171
10 Local Standard for Housing and Utilities (excluding mortgage)	573
11 Local Standard for Transportation (two cars)	911
12 Other Necessary Expenses (family specific situation)	500
13 Total Standard Expenses	3,306

	Different Income Scenarios			Different Home Price Decline Scenarios	
14 Ratio of Current Mortgage Payment (P&I) to Pre-Tax Income	45%	40%	35%	40%	40%
15 Annual pre-tax income	71,975	80,972	92,540	80,972	80,972
16 Monthly pre-tax Income	5,998	6,748	7,712	6,748	6,748
17 Monthly after-tax Income (assuming 20% effective tax rate, including federal, state taxes, soc	4,798	5,398	6,169	5,398	5,398
18 Monthly disposable income prior to BK filing	(1,207)	(607)	164	(607)	(607)
19 Is borrower currently at risk of default (yes if disposable income prior to BK is negative)	Yes	Yes	No	Yes	Yes
20 Property Value Decline	30%	30%	30%	20%	40%
21 Second Lien Cram Down Amount	40,000	40,000	40,000	40,000	40,000
22 First Lien Cram Down Amount	40,000	40,000	40,000	0	80,000
23 New Mortgage Payment after Cram Down (at 6% rate and 40 yr amortization)	1,541	1,541	1,541	1,761	1,321
24 Other unsecured debts	10,000	10,000	10,000	10,000	10,000
25 Monthly disposable income after BK filing	(48)	441	1,058	265	617
26 Is the BK plan feasible? (yes if the disposable income after cram down is positive)	No	Yes	Yes	Yes	Yes
27 Total Recovery to First Lien Cram Down (assuming completion of 5yr plan)		11,766	28,218	0	22,793
28 Recovery % of First Lien Cram Down (% of Cram Down Amount)		29%	71%		28%
29 Total Recovery to Second Lien Cram Down		11,766	28,218	12,728	11,396
30 Recovery % of Second Lien Cram Down (% of Cram Down Amount)		29%	71%	32%	28%
31 Total Recovery to Unsecured Claims		2,942	7,054	3,182	2,849
32 Recovery % to Unsecured Claims (% of unsecured claim balance)		29%	71%	32%	28%
33 Benefit to borrower from mortgage cramdown		56,467	23,564	27,272	85,811
34 Severity to first lien (assuming foreclosure now)		60%	60%	60%	60%
35 Severity to first lien after cram down (assuming 50% of failure rate of BK and severity is 65% at future default)		37%	34%	33%	41%
36 Severity to second lien (assuming foreclosure now)		100%	100%	100%	100%
37 Severity to second lien after cram down (assuming 50% of failure rate of BK)		85%	65%	84%	86%

Source: Credit Suisse, U.S. Trustee program

STRUCTURED PRODUCTS RESEARCH

Gail Lee, Managing Director
Global Head of Structured Products Research
+1 212 325 1214

Bunt Ghosh, Managing Director
Global Head of Fixed Income Research
+44 20 7888 3042

NORTH AMERICA

Eleven Madison Avenue, New York, NY 10010

Asset-Backed Securities (ABS)

Rod Dubitsky, Managing Director	Larry Yang, Vice President	Stevan Stevanovic, Vice President	Thomas Suehr, Associate
Senior Strategist, Group Head +1 212 325 4740 rod.dubitsky@credit-suisse.com	+1 212 325 2952 larry.yang@credit-suisse.com	+1 212 325 9210 stevan.stevanovic@credit-suisse.com	+1 212 325 3663 thomas.suehr@credit-suisse.com

Collateralized Debt Obligations (CDO)

David Yan, Director	Serif Ustun, Vice President	Helena Jiang, Associate
+1 212 325 5792 david.yan@credit-suisse.com	+1 212 538 4582 serif.ustun@credit-suisse.com	+1 212 325 1148 helena.jiang@credit-suisse.com

Commercial Mortgage Backed Securities (CMBS)

Gail Lee, Managing Director	Paul Fitzsimmons, Director	Erin Quinn, Associate
Senior Strategist, Group Head +1 212 325 1214 gail.lee@credit-suisse.com	+1 212 538 8567 paul.fitzsimmons@credit-suisse.com	+1 212 325 2128 erin.quinn@credit-suisse.com

Mortgage Backed Securities — Residential (MBS)

Mahesh Swaminathan, Director	Chandrajit Bhattacharya, Director	Mukul Chhabra, Associate
+1 212 325 8789 mahesh.swaminathan@credit-suisse.com	+1 212 325 1546 chandrajit.bhattacharya@credit-suisse.com	+1 212 325 0709 mukul.chhabra@credit-suisse.com

EUROPE – Structured Products (All)

One Cabot Square, London E14 4QJ, United Kingdom

Carlos Diaz, Associate
+44 20 7883 9099 carlos.diaz@credit-suisse.com

JAPAN – Structured Products (All)

Izumi Garden Tower, 1-6 Roppongi 1-Chome, Minato-ku, Tokyo 106-6024

Tomohiro Miyasaka, Director	Naoya Sugimoto, Associate
Japan Head + 81 3 4550 7171 tomohiro.miyasaka@credit-suisse.com	+81 3 4550 7189 naoya.sugimoto@credit-suisse.com

Disclosure Appendix

Analyst Certification

The analysts identified in this report each certify, with respect to the companies or securities that the individual analyzes, that (1) the views expressed in this report accurately reflect his or her personal views about all of the subject companies and securities and (2) no part of his or her compensation was, is or will be directly or indirectly related to the specific recommendations or views expressed in this report.

Important Disclosures

Credit Suisse's policy is only to publish investment research that is impartial, independent, clear, fair and not misleading. For more detail, please refer to Credit Suisse's Policies for Managing Conflicts of Interest in connection with Investment Research: http://www.csfb.com/research-and-analytics/disclaimer/managing_conflicts_disclaimer.html

Credit Suisse's policy is to publish research reports as it deems appropriate, based on developments with the subject issuer, the sector or the market that may have a material impact on the research views or opinions stated herein.

The analyst(s) involved in the preparation of this research report received compensation that is based upon various factors, including Credit Suisse's total revenues, a portion of which are generated by Credit Suisse's Investment Banking and Fixed Income Divisions.

Credit Suisse may trade as principal in the securities or derivatives of the issuers that are the subject of this report.

At any point in time, Credit Suisse is likely to have significant holdings in the securities mentioned in this report.

As at the date of this report, Credit Suisse acts as a market maker or liquidity provider in the debt securities of the subject issuer(s) mentioned in this report.

For important disclosure information on securities recommended in this report, please visit the website at <https://researchdisclosure.credit-suisse.com> or call +1-212-538-7625.

For the history of any relative value trade ideas suggested by the Fixed Income research department as well as fundamental recommendations provided by the Emerging Markets Sovereign Strategy Group over the previous 12 months, please view the document at http://research-and-analytics.csfb.com/docpopup.asp?ctbdocid=330703_1_en. Credit Suisse clients with access to the Locus website may refer to <http://www.credit-suisse.com/locus>.

For the history of recommendations provided by Technical Analysis, please visit the website at <http://www.credit-suisse.com/techanalysis>.

Credit Suisse does not provide any tax advice. Any statement herein regarding any US federal tax is not intended or written to be used, and cannot be used, by any taxpayer for the purposes of avoiding any penalties.

Emerging Markets Bond Recommendation Definitions

Buy: Indicates a recommended buy on our expectation that the issue will deliver a return higher than the risk-free rate.

Sell: Indicates a recommended sell on our expectation that the issue will deliver a return lower than the risk-free rate.

Corporate Bond Fundamental Recommendation Definitions

Buy: Indicates a recommended buy on our expectation that the issue will be a top performer in its sector.

Outperform: Indicates an above-average total return performer within its sector. Bonds in this category have stable or improving credit profiles and are undervalued, or they may be weaker credits that, we believe, are cheap relative to the sector and are expected to outperform on a total-return basis. These bonds may possess price risk in a volatile environment.

Market Perform: Indicates a bond that is expected to return average performance in its sector.

Underperform: Indicates a below-average total-return performer within its sector. Bonds in this category have weak or worsening credit trends, or they may be stable credits that, we believe, are overvalued or rich relative to the sector.

Sell: Indicates a recommended sell on the expectation that the issue will be among the poor performers in its sector.

Restricted: In certain circumstances, Credit Suisse policy and/or applicable law and regulations preclude certain types of communications, including an investment recommendation, during the course of Credit Suisse's engagement in an investment banking transaction and in certain other circumstances.

Not Rated: Credit Suisse Global Credit Research or Global Leveraged Finance Research covers the issuer but currently does not offer an investment view on the subject issue.

Not Covered: Neither Credit Suisse Global Credit Research nor Global Leveraged Finance Research covers the issuer or offers an investment view on the issuer or any securities related to it. Any communication from Research on securities or companies that Credit Suisse does not cover is a reasonable, non-material deduction based on an analysis of publicly available information.

Corporate Bond Risk Category Definitions

In addition to the recommendation, each issue may have a risk category indicating that it is an appropriate holding for an "average" high yield investor, designated as **Market**, or that it has a higher or lower risk profile, designated as **Speculative** and **Conservative**, respectively.

Credit Suisse Credit Rating Definitions

Credit Suisse may assign rating opinions to investment-grade and crossover issuers. Ratings are based on our assessment of a company's creditworthiness and are not recommendations to buy or sell a security. The ratings scale (AAA, AA, A, BBB, BB, B) is dependent on our assessment of an issuer's ability to meet its financial commitments in a timely manner. Within each category, creditworthiness is further detailed with a scale of High, Mid, or Low – with High being the strongest sub-category rating: **High AAA, Mid AAA, Low AAA** – obligor's capacity to meet its financial commitments is extremely strong; **High AA, Mid AA, Low AA** – obligor's capacity to meet its financial commitments is very strong; **High A, Mid A, Low A** – obligor's capacity to meet its financial commitments is strong; **High BBB, Mid BBB, Low BBB** – obligor's capacity to meet its financial commitments is adequate, but adverse economic/operating/financial circumstances are more likely to lead to a weakened capacity to meet its obligations; **High BB, Mid BB, Low BB** – obligations have speculative characteristics and are subject to substantial credit risk; **High B, Mid B, Low B** – obligor's capacity to meet its financial commitments is very weak and highly vulnerable to adverse economic, operating, and financial circumstances; **High CCC, Mid CCC, Low CCC** – obligor's capacity to meet its financial commitments is extremely weak and is dependent on favorable economic, operating, and financial circumstances. Credit Suisse's rating opinions do not necessarily correlate with those of the rating agencies.

References in this report to Credit Suisse include all of the subsidiaries and affiliates of Credit Suisse operating under its investment banking division. For more information on our structure, please use the following link: http://www.credit-suisse.com/who_we_are/en.

This report is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or which would subject Credit Suisse or its affiliates ("CS") to any registration or licensing requirement within such jurisdiction. All material presented in this report, unless specifically indicated otherwise, is under copyright to CS. None of the material, nor its content, nor any copy of it, may be altered in any way, transmitted to, copied or distributed to any other party, without the prior express written permission of CS. All trademarks, service marks and logos used in this report are trademarks or service marks or registered trademarks or service marks of CS or its affiliates.

The information, tools and material presented in this report are provided to you for information purposes only and are not to be used or considered as an offer or the solicitation of an offer to sell or to buy or subscribe for securities or other financial instruments. CS may not have taken any steps to ensure that the securities referred to in this report are suitable for any particular investor. CS will not treat recipients of this report as its customers by virtue of their receiving this report. The investments and services contained or referred to in this report may not be suitable for you and it is recommended that you consult an independent investment advisor if you are in doubt about such investments or investment services. Nothing in this report constitutes investment, legal, accounting or tax advice, or a representation that any investment or strategy is suitable or appropriate to your individual circumstances, or otherwise constitutes a personal recommendation to you. CS does not advise on the tax consequences of investments and you are advised to contact an independent tax adviser. Please note in particular that the bases and levels of taxation may change.

Information and opinions presented in this report have been obtained or derived from sources believed by CS to be reliable, but CS makes no representation as to their accuracy or completeness. CS accepts no liability for loss arising from the use of the material presented in this report, except that this exclusion of liability does not apply to the extent that such liability arises under specific statutes or regulations applicable to CS. This report is not to be relied upon in substitution for the exercise of independent judgment. CS may have issued, and may in the future issue, other reports that are inconsistent with, and reach different conclusions from, the information presented in this report. Those reports reflect the different assumptions, views and analytical methods of the analysts who prepared them and CS is under no obligation to ensure that such other reports are brought to the attention of any recipient of this report.

CS may, to the extent permitted by law, participate or invest in financing transactions with the issuer(s) of the securities referred to in this report, perform services for or solicit business from such issuers, and/or have a position or holding, or other material interest, or effect transactions, in such securities or options thereon, or other investments related thereto. In addition, it may make markets in the securities mentioned in the material presented in this report. CS may have, within the last three years, served as manager or co-manager of a public offering of securities for, or currently may make a primary market in issues of, any or all of the entities mentioned in this report or may be providing, or have provided within the previous 12 months, significant advice or investment services in relation to the investment concerned or a related investment. Additional information is, subject to duties of confidentiality, available on request. Some investments referred to in this report will be offered solely by a single entity and in the case of some investments solely by CS, or an associate of CS or CS may be the only market maker in such investments.

Past performance should not be taken as an indication or guarantee of future performance, and no representation or warranty, express or implied, is made regarding future performance. Information, opinions and estimates contained in this report reflect a judgement at its original date of publication by CS and are subject to change without notice. The price, value of and income from any of the securities or financial instruments mentioned in this report can fall as well as rise. The value of securities and financial instruments is subject to exchange rate fluctuation that may have a positive or adverse effect on the price or income of such securities or financial instruments. Investors in securities such as ADR's, the values of which are influenced by currency volatility, effectively assume this risk.

Structured securities are complex instruments, typically involve a high degree of risk and are intended for sale only to sophisticated investors who are capable of understanding and assuming the risks involved. The market value of any structured security may be affected by changes in economic, financial and political factors (including, but not limited to, spot and forward interest and exchange rates), time to maturity, market conditions and volatility, and the credit quality of any issuer or reference issuer. Any investor interested in purchasing a structured product should conduct their own investigation and analysis of the product and consult with their own professional advisers as to the risks involved in making such a purchase.

Some investments discussed in this report may have a high level of volatility. High volatility investments may experience sudden and large falls in their value causing losses when that investment is realised. Those losses may equal your original investment. Indeed, in the case of some investments the potential losses may exceed the amount of initial investment and, in such circumstances, you may be required to pay more money to support those losses. Income yields from investments may fluctuate and, in consequence, initial capital paid to make the investment may be used as part of that income yield. Some investments may not be readily realisable and it may be difficult to sell or realise those investments, similarly it may prove difficult for you to obtain reliable information about the value, or risks, to which such an investment is exposed.

This report may provide the addresses of, or contain hyperlinks to, websites. Except to the extent to which the report refers to website material of CS, CS has not reviewed any such site and takes no responsibility for the content contained therein. Such address or hyperlink (including addresses or hyperlinks to CS's own website material) is provided solely for your convenience and information and the content of any such website does not in any way form part of this document. Accessing such website or following such link through this report or CS's website shall be at your own risk.

This report is issued and distributed in Europe (except Switzerland) by Credit Suisse Securities (Europe) Limited, One Cabot Square, London E14 4QJ, England, which is regulated in the United Kingdom by The Financial Services Authority ("FSA"). This report is being distributed in Germany by Credit Suisse Securities (Europe) Limited Niederlassung Frankfurt am Main regulated by the Bundesanstalt fuer Finanzdienstleistungsaufsicht ("BaFin"). This report is being distributed in the United States and Canada by Credit Suisse Securities (USA) LLC; in Switzerland by Credit Suisse; in Brazil by Banco de Investimentos Credit Suisse (Brasil) S.A.; in Japan by Credit Suisse Securities (Japan) Limited, Financial Instruments Firm, Director-General of Kanto Local Finance Bureau (*Kinsho*) No. 66, a member of Japan Securities Dealers Association, The Financial Futures Association of Japan; elsewhere in Asia/ Pacific by whichever of the following is the appropriately authorised entity in the relevant jurisdiction: Credit Suisse (Hong Kong) Limited, Credit Suisse Equities (Australia) Limited, Credit Suisse Securities (Thailand) Limited, Credit Suisse Securities (Malaysia) Sdn Bhd, Credit Suisse Singapore Branch, and elsewhere in the world by the relevant authorised affiliate of the above. Research on Taiwanese securities produced by Credit Suisse, Taipei Branch has been prepared by a registered Senior Business Person. Research provided to residents of Malaysia is authorised by the Head of Research for Credit Suisse Securities (Malaysia) Sdn Bhd, to whom they should direct any queries on +603 2723 2020. This research may not conform to Canadian disclosure requirements.

In jurisdictions where CS is not already registered or licensed to trade in securities, transactions will only be effected in accordance with applicable securities legislation, which will vary from jurisdiction to jurisdiction and may require that the trade be made in accordance with applicable exemptions from registration or licensing requirements. Non-U.S. customers wishing to effect a transaction should contact a CS entity in their local jurisdiction unless governing law permits otherwise. U.S. customers wishing to effect a transaction should do so only by contacting a representative at Credit Suisse Securities (USA) LLC in the U.S.

This material is not for distribution to retail clients and is directed exclusively at Credit Suisse's market professional and institutional clients. Recipients who are not market professional or institutional investor clients of CS should seek the advice of their independent financial advisor prior to taking any investment decision based on this report or for any necessary explanation of its contents. This research may relate to investments or services of a person outside of the UK or to other matters which are not regulated by the FSA or in respect of which the protections of the FSA for private customers and/or the UK compensation scheme may not be available, and further details as to where this may be the case are available upon request in respect of this report.

Copyright © 2009 CREDIT SUISSE GROUP and/or its affiliates. All rights reserved.

Investment principal on bonds can be eroded depending on sale price or market price. In addition, there are bonds on which investment principal can be eroded due to changes in redemption amounts. Care is required when investing in such instruments.

When you purchase non-listed Japanese fixed income securities (Japanese government bonds, Japanese municipal bonds, Japanese government guaranteed bonds, Japanese corporate bonds) from CS as a seller, you will be requested to pay purchase price only.